

Date: Thu, 10 Jun 93 11:26:13 PDT  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V93 #708  
To: Info-Hams

Info-Hams Digest                      Thu, 10 Jun 93                      Volume 93 : Issue 708

Today's Topics:

    Astron as battery charger (was Field Day Power)  
        Blue Language Repeaters  
        Callbook server  
        computers/printer/software/ham gear  
Daily Solar Geophysical Data Broadcast for 09 June  
    Field Day Power  
    FT-530 HT coverage expansion mods needed  
        ham radios in movies (2 msgs)  
        HW-100 versus HW-101 ???  
    Labelling of layers in Ionosphere  
    Memphis ham radio stores?  
    NQOI Loses Big PRB-1 Antenna Case  
    Question: Can a novice take the extra  
    Recommendations for Miscrosat antenna systems  
    The ITU phonetic alphabet

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: 10 Jun 93 08:55:30 GMT  
From: ogicse!emory!swrinde!gatech!wa4mei!ke4zv!gary@network.UCSD.EDU  
Subject: Astron as battery charger (was Field Day Power)  
To: info-hams@ucsd.edu

In article <1993Jun9.163459.3277@sequent.com> dale@sequent.com (Dale Mosby)  
writes:

>

>The question I have is how will the Astron supply react should it  
>be turned off and see a connection to an infinite current source  
>at 12 volts connected to its output? Does anyone have an Astron  
>schematic and is able to determine if it will survive this? Has  
>anyone done this. I'm sure that as long as the Astron is powered  
>up it will make a fine battery charger, my concern is that I'll  
>melt a couple of transistors if the power supply is turned off.

The transistors won't care, but it'll sure take the LM723 right  
off the board. Just put a big diode in series with the positive  
lead and all will be well.

>Thanks for the reminder as to safety with grounding and refueling,  
>but Jim and Dave can be replaced. I'm worried about the TS-850.

Yeah, you have to keep your priorities straight. :-)

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

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Date: 9 Jun 93 17:34:36 GMT  
From: elroy.jpl.nasa.gov!usc!howland.reston.ans.net!sol.ctr.columbia.edu!  
news.kei.com!ddsw1!indep1!clifto@decwrl.dec.com  
Subject: Blue Language Repeaters  
To: info-hams@ucsd.edu

In article <1993Jun8.152757.21528@ke4zv.uucp> gary@ke4zv.UUCP (Gary Coffman)  
writes:

>on this repeater obscene. My cut on that, as with content questions  
>in broadcasting, is that that is one of the reasons for off switches  
>and tuning knobs. No one need be offended because no one is \*forced\*  
>to listen to, or watch, that which offends them. There are all too  
>many Mrs. Grundys in the world who wish to force their morality on  
>others. They should be told firmly to not poke their noses into  
>other people's business.

Oh, noooo! I disagree wholeheartedly. It is my right as an American  
citizen to force producers, directors, writers, broadcasters, etc. to  
spend millions, even billions, of dollars producing and broadcasting ONLY  
things that don't offend me, regardless of whether they lose money on the  
project, regardless of whether no one else watches the TV station or listens

to the radio station (thus making their commercials worthless, removing revenue, and putting them off the air), regardless of whether or not anyone else approves or wants to watch something else. The rights of others are totally meaningless and irrelevant; I want what I want and I want it NOW. You get your inane Barney off Public TV; all that propaganda being fed to children is highly objectionable to me. Get "Where in the World is Carmen Sandiego" off, too, because I hate geography with a passion. And all those half-naked people on Public TV... smut!

Besides, the word "real" offends me no end. Any program that contains that word should be banned and the people responsible jailed for eternity. Any repeater that repeats that word should be permanently confiscated and the licensee fined \$1,000,000,000,000 and jailed for 999 years.

Why in heck should I go to the trouble of reaching for the tuning knob or the on/off switch? Let THEM spend the billions needed to take care of my needs.

Excuse me. I'd go on, but I have to see the doctor about having my tongue removed from my cheek...

--

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+-----+
|  Cliff Sharp  |      clifto@indep1.chi.il.us  OR  clifto@indep1.uucp  |
|    WA9PDM    |                        Use whichever one works      |
+-----+
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Date: Wed, 09 Jun 93 23:07:37 GMT  
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!math.ohio-state.edu!magnus.acs.ohio-state.edu!cis.ohio-state.edu!mstar!n8emr!  
gws@network.UCSD.EDU  
Subject: Callbook server  
To: info-hams@ucsd.edu

In article <C8BxyK.Jt2@feenix.metronet.com> marcbg@feenix.metronet.com (Marc Grant) writes:

>  
>The callbook server at electra.cs.buffalo.edu is about 1 year out of date.  
> With all the new hams and changes over the past year, it's high time that  
>it should be updated.  
>Now, maybe I'm missing something - is there another way of getting  
>You don't have to send me replies via e-mail, we can keep it on this  
>usenet forum and maybe we'll raise the consciousness level a little.  
>-----  
>|Marc B. Grant, N5MEI            Internet: marcbg@feenix.metronet.com

Marc,

I think your consciousness needs a little leveling.  
Who are you to dictate if/when the callsign server should be updated?

The folks at buffalo.edu, myself and several others have all offered callsign lookups via various direct and indirect methods on the internet. Might I have your mailing address? Ill drop you an invoice for your share of the fees to get the latest database. Depending on how you get the database its going to cost the supporting group \$100 and up for a twice yearly updated callbook. Since most offer the database lookups as a friendly service a note of thanks to the database maintainer should be in order instead of this slamming post.

--

Gary W. Sanders gws@n8emr.cmhnet.org, 72277,1325  
N8EMR @ N8JYV (ip addr) 44.70.0.1 [Ohio AMPR address coordinator]  
HAM BBS 614-895-2553 (1200/2400/V.32/PEP) Voice: 614-895-2552 (eves/weekends)

-----  
Date: Thu, 10 Jun 1993 04:59:45 GMT  
From: amdcad!amdcl2!brian@decwrl.dec.com  
Subject: computers/printer/software/ham gear  
To: info-hams@ucsd.edu

(Andy Warner) writes:

>  
> In article <1575@arrl.org>, ppagel@arrl.org (Paul Pagel) writes:  
> > I've updated my system and need to do some housecleaning.  
> > Reasonable offers considered.  
> > [... astonishing familiar looking post deleted for the sake of sanity ...]  
>  
> For crying out loud, do you have to post this to the wrong newsgroup  
> \*every\* week ?

I agree. I said the same thing (politely) to Paul via private e-mail a couple of weeks ago. Since it doesn't appear that it had any effect, perhaps someone else at the ARRL can explain how the net works to Paul.

Brian McMinn N5PSS brian.mcminn@amd.com

-----  
Date: 10 Jun 93 03:46:54 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: Daily Solar Geophysical Data Broadcast for 09 June  
To: info-hams@ucsd.edu

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 160, 06/09/93  
10.7 FLUX=115.4 90-AVG=118 SSN=062 BKI=2312 1122 BAI=006

BGND-XRAY=B3.6      FLU1=2.2E+06   FLU10=1.4E+04   PKI=3322 2222   PAI=008  
BOU-DEV=016,027,008,014,008,008,010,014   DEV-AVG=013 NT   SWF=01:018  
XRAY-MAX= M2.2   @ 1838UT   XRAY-MIN= B2.6   @ 0031UT   XRAY-AVG= C1.3  
NEUTN-MAX= +000%   @ 0000UT   NEUTN-MIN= +000%   @ 0000UT   NEUTN-AVG= +0.0%  
PCA-MAX= +0.0DB @ 0000UT   PCA-MIN= +0.0DB @ 0000UT   PCA-AVG= +0.0DB  
BOUTF-MAX=55374NT @ 0046UT   BOUTF-MIN=55329NT @ 1850UT   BOUTF-AVG=55358NT  
GOES7-MAX=P:+000NT@ 0000UT   GOES7-MIN=N:+000NT@ 0000UT   G7-AVG=+075,+000,+000  
GOES6-MAX=P:+112NT@ 1621UT   GOES6-MIN=N:-082NT@ 0115UT   G6-AVG=+099,-020,-053  
FLUXFCST=STD:105,100,090;SESC:105,100,090   BAI/PAI-FCST=020,020,020/035,025,018  
KFCST=4445 4443 4445 4444   27DAY-AP=008,017   27DAY-KP=3212 1232 2334 5332  
WARNINGS=\*SWF;\*PROTON;\*GSTRM;\*AURMIDWRN  
ALERTS=\*\*MINFLR:M2.2/1B@1838UTC,S12W59(7518)  
!!END-DATA!!

NOTE: The Effective Sunspot Number for 08 JUN 93 was 79.0.  
The Full Kp Indices for 08 JUN 93 are: 4- 4- 3+ 3- 3- 3- 3- 20

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Date: 9 Jun 93 13:50:48 GMT  
From: ogicse!emory!sol.ctr.columbia.edu!usenet.ucs.indiana.edu!master.cs.rose-hulman.edu!master.cs.rose-hulman.edu!news@network.UCSD.EDU  
Subject: Field Day Power  
To: info-hams@ucsd.edu

In article <1993Jun8.151404.9586@icd.teradyne.com>  
ardai@wizard.atb.teradyne.com (Michael Ardai) writes:  
> In article <1993Jun7.204302.19897@sequent.com> dale@sequent.com (Dale Mosby) writes:  
> >With Field Day getting close, and planning on running a generator  
> >this year, I've gotten to wondering about the power and safety of  
> >my equipment.  
>

A local ham built a snazzy field day power device. He used an automobile alternator, regulator, and junk one-cylinder B & S engine.

This produced regulated 12-V source good for about 40 Amperes. He added some noise reduction stuff but I can't remember what it was.

When his batteries began to sag, he merely fired up the engine. Beats running your vehicle engine for hours.

I've been wanting to duplicate this rig for a long time, but am too lazy.

73 de K9CUN, Jack

-----  
Date: Thu, 10 Jun 1993 02:55:48 GMT  
From: olivea!sgigate!sgiblab!news.kpc.com!kpc!sleat@decwrl.dec.com  
Subject: FT-530 HT coverage expansion mods needed  
To: info-hams@ucsd.edu

In article <1993Jun09.185705.25169@microsoft.com>, frede@microsoft.com (Frederick Einstein) writes:

|> ...Shack solder remover (like a soldering iron with a sucker bulb) with great success. DO NOT  
|> USE DE-SOLDERING WICK!!!!

When issuing pronouncements such as the above, it might help to offer some explanation or justification for your apparently strong opinion.

In my experience working on surface-mount boards, I have found that solder wick is much preferable to a solder sucker. Why do you suggest [hint] not using it?

Michael Sleator (KD6VBQ)	Voice:	408-748-6339
Kubota Pacific Computer	FAX:	408-748-6301
2630 Walsh Ave.	internet:	sleat@kpc.com
Santa Clara, CA 95051	uucp:	...!uunet!kpc!sleat

-----  
Date: Thu, 10 Jun 1993 15:49:33 GMT  
From: elroy.jpl.nasa.gov!sdd.hp.com!apollo.hp.com!hpwin052!hpmoea!dstock@ames.arpa  
Subject: Ham Radios in movies  
To: info-hams@ucsd.edu

Duuuhhh Um ?

I thought that all the action in "Ice Station Zebra" was in the polar base (British), the American submarine, or out on the icefield.

Why would a cinematographer feel it appropriate to stuff any of these places with Russian labelled 'scopes ?

Unless the russian agent snuck them in, or their paratroops dropped them?

Cheers  
David

Doctor Who was great fun. William Hartnell didn't play the doctor in the first film, Peter Cushing did. The tardis control panel wasn't octagonal but a Solartron oscilloscope of 1950s vintage ? They may have used kitchen utensils but they never scrimped on gold and silver paint (especially on the beaters )

-----  
Date: Wed, 09 Jun 93 00:07:00 CDT  
From: agate!howland.reston.ans.net!gatech!concert!news-feed-1.peachnet.edu!umn.edu!uum1!kksys.com!edgar!brainiac!moron!pillock!stevej@ames.arpa  
Subject: ham radios in movies  
To: info-hams@ucsd.edu

oo7@emx.cc.utexas.edu (Derek Wills) writes:

> turner@safety.ics.uci.edu (Clark Savage Turner) mentions:  
>  
> >>That brings up an interesting note....I have seen ham radio equipment in  
> >>a number of movies. I wonder if others keep track:  
>  
> >>The Anderson Tapes - saw the kid use an HW-101 to get help.  
> >>The Godzilla movies (forget which one) - saw a Yaesu FTdx 560 used as  
> part of a "death ray" weapon.  
> >>Buckaroo Banzai - this little kid keeps in touch with Buckaroo with a Kenwo  
> TS-520.  
>  
>  
>  
> One of the James Bond movies (Dr No?) has a KW Vanguard in one of the  
> opening scenes - same rig as I used in G-land as a spotty youth. I do  
> realize that this dates me.  
>  
>

Bruce Willis - Die Hard - Kenwood TH-?? series HT  
Sam - Cheers - HF on the Yacht  
Night Flight? Slick Airways, takes place in Vancouver,BC. Kenwood 940 on the desk as I remember.

More as I recall them...

Steve KA0VYB

-----  
Date: 8 Jun 93 17:34:32 EST  
From: titan.ksc.nasa.gov!k4dii.ksc.nasa.gov!user@ames.arpa  
Subject: HW-100 versus HW-101 ???

To: info-hams@ucsd.edu

In article <9306072011.AA06815@inet-gw-1.pa.dec.com>,  
greg@willie.nl.nuwc.navy.mil (Greg) wrote:

> Does anyone out there know the difference between a Heathkit HW-100 and the  
> later model HW-101?. Reply here or to me at greg@wasik.nl.nuwc.navy.mil.

Greg-

I had the HW-100, in which the dial mechanism had been modified to use a "vernier" knob. As I recall, the dial mechanism, and possibly the VFO, were the main difference(s) between the HW-100 and HW-101. The HW-100 dial mechanism was a significant weak spot in the radio.

Later, I had two SB-102's. I found that with few exceptions, the SB-series was just a "luxury" version of the HW-series of that era. The SB-series did have a better VFO and dial mechanism, a nicer case, a better dial-cord vs O-ring drive system, nicer knobs, et cetera. Otherwise, the circuitry was nearly the same.

Although they all sounded very good on the air, the SB-10X and HW-10X radios shared a couple of weakness in their design.

1. The heterodyne oscillator required very good crystals, since there was little feedback in the circuit. A friend was able to jury-rig a cathode resistor, and was able to increase feedback, allowing the continued use of the "defective" crystals!

2. There were RF (ground loop?) problems associated with the inter-stage shield plates in with the area around the sections of the band switch. The problem involved the bottom cover plate for that section, which had brass contacts between the cover plate and the inter-stage shield plates. As the radios age, plating on the metal wears away and/or becomes corroded, reducing the effectiveness of the brass contacts. As I recall, the symptoms were reduced output on some bands, with no obvious cause.

While these radios had their place in Ham history, I wouldn't recommend one unless you are a good RF circuit person, and have lots of time on your hands.

73, Fred, K4DII

fred-mckenzie@ksc.nasa.gov

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Date: 10 Jun 93 06:12:28 GMT

From: news-mail-gateway@ucsd.edu

Subject: Labelling of layers in Ionisphere  
To: info-hams@ucsd.edu

Last night during our review session for a novice/tech class, I was up at the board talking about the various layers of the ionosphere and their effects on radio propagation when someone asked "If these are D, E and F, where are A, B, and C?" Stumped me. Our best collective guess was that there might be lower layers with those designations but that they don't affect radio so we never talk about them. Can anyone enlighten me? (and the class)

Thanks

Kevin - WB2EMS (fkf1@cornell.edu)

-----  
Date: 10 Jun 1993 06:07:58 -0400  
From: netnews!panix!panix!not-for-mail@nyu.arpa  
Subject: Memphis ham radio stores?  
To: info-hams@ucsd.edu

In <1993Jun9.230131.1@ualr.edu> hudson@ualr.edu writes:

>Week after next, I will be going to Memphis, and wonder if there is a ham  
>radio store there. I thought I remembered one from QSTs (many years ago???)  
>but did not find anything in the CQ and 73 mags I have that are recent  
>vintage. Can anyone help with store names (and maybe addresses???)?

Memphis Amateur Electronics  
1465 Wells Station Road  
Memphis, TN 38010  
1-800-238-6168  
M-F 9-5  
S 9-12

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See the happy moron, .....  
He doesn't give a damn, .. Clay Irving      personal: clay@panix.com    ..  
I wish I were a moron, .. New York, NY      work: clay@garpac.com    ..  
My God! perhaps I am! .....

-----  
Date: 9 Jun 93 16:49:11 GMT  
From: agate!howland.reston.ans.net!math.ohio-state.edu!pacific.mps.ohio-state.edu!  
linac!att!att!bigtop!drutx!druwa!n2ic@ames.arpa  
Subject: NQ0I Loses Big PRB-1 Antenna Case

To: info-hams@ucsd.edu

See rec.radio.amateur.policy for the text of the Federal Appeals Court decision.

You won't see bad news like this published in QST !

Steve, N2IC/0

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Date: 10 Jun 1993 07:32 EDT

From: agate!howland.reston.ans.net!ux1.cso.uiuc.edu!uchinews!cs.umd.edu!

skates.gsfc.nasa.gov!nssdca.gsfc.nasa.gov!stocker@ames.arpa

Subject: Question: Can a novice take the extra

To: info-hams@ucsd.edu

[stuff deleted]

>Regarding seeing ORIGINAL Licenses before issueing an upgrade, that is an FCC  
>law, not a VE decision. We dont want to risk \$8000 fine and loss of our license.  
>

>However, since a VE Team can give exams and issue CSCE's without seeing any  
>original license, ANY person can LEGALLY attend, pay, pass, receive a CSCE for  
>ANY element. For a nocoder, the CSCE is all he needs to posses to operated HF  
>in the band limits of Technician. Bottom line, if a VE Team refuses to give an  
>exam &/or CSCE to anyone showing valid ID, I think you have a legitimate  
complaint

>to the VEC. At this point, you can go home and operate Technician HF.

>

>Later, the VE Team will need to see the ORIGINAL to issue a CSCE showing the  
upgrade.

>If that isnt done, then nowhere will the upgrade be recorded. The ARRL exchanges  
>a database of upgrades (even though no 610 is sent to the FCC) with the FCC. If  
this

>second step isnt done, the FCC will not know you are a TECH+.

>

>

>73 Bob KD1GG

>

>

>

>

There is only one class of Technician not two. The FCC does not maintain  
two separate license classes for Tech. For any Tech to be able to operate  
in the Novice portion of the HF bands requires only a CSCE for element 1.  
There is no upgrade and the FCC doesn't get involved in the process. As a  
result, I can't see that the FCC has anything to do with the requirement by

a VEC to see an original on a Tech license to take and pass element 1.

Indeed, no license needs to be shown at all. All that is required is the demonstration of who you are through the required identification. The Tech then must maintain the CSCE for element 1 at the station along with the tech license. The CSCE gives the authority to operate in the appropriate HF bands.

Erich  
N3OXM

-----  
Date: 10 Jun 93 09:17:25 GMT  
From: ogicse!emory!swrinde!gatech!wa4mei!ke4zv!gary@network.UCSD.EDU  
Subject: Recommendations for Miscrosat antenna systems  
To: info-hams@ucsd.edu

In article <1993Jun09.200352.17128@microsoft.com> davidar@microsoft.com (David Arnold) writes:

>Comments on dual-band vs. 2m/70cm separates for working the Microsats.  
>I have the Ringo Ranger ARX-2B and was thinking of getting a 450mhz  
>vertical, however, the gain for the ARX-2B and ARX-450B is 7db. The  
>Cushcraft ARX-270 has a gain of 9db for 2m and 12db for 70cm. I  
>would rather just have one tri-bander vs. 2 separate verticals. My  
>rig doesn't have a built in duplexer.

Dave, verticals work, but higher gain verticals get their gain by concentrating the signal towards the horizon. That's fine when the satellite is on the horizon, but less satisfactory when it's above the horizon. When the satellite gets above 30 degrees, a simple 1/4 wave will do better than a gain vertical. Naturally, tracking beams are much better. If you can't do el-az tracking, a simple 4 element beam inclined at 30 degrees and rotated only in azimuth is a big improvement over the vertical. Your mileage will vary depending on local terrain obstacles, experiment.

Gary

--  
Gary Coffman KE4ZV                   |     You make it,             | gatech!wa4mei!ke4zv!gary  
Destructive Testing Systems |     we break it.           | uunet!rsiatl!ke4zv!gary  
534 Shannon Way            |     Guaranteed!           | emory!kd4nc!ke4zv!gary  
Lawrenceville, GA 30244   |                                |

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Date: Thu, 10 Jun 1993 03:55:36 GMT

From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!gatech!news-feed-1.peachnet.edu!umn.edu!csus.edu!netcom.com!netcomsv!bongo!  
julian@network.UCSD.EDU  
Subject: The ITU phonetic alphabet  
To: info-hams@ucsd.edu

In article <130431@netnews.upenn.edu> yee@mipg.upenn.edu (Conway Yee) writes:  
>The rational behind a phonetic alphabet is to make the copying of letters  
>easier; on the air, many of the letters can sound alike. The use of identifying  
>words makes the differentiation much easier.  
>  
>I have been told that the use of multi-syllable words also makes things easier  
>since if one syllable is missed, the rest of the word can identify the first  
>syllable. Thus, the redundancy in the English language is used to great  
>advantage.  
>  
>Now for my question. What was the rational behind using the words Mike and  
>Golf for the letters M and G? A multisyllabic word would seem to me more  
>appropriate. In other phonetic alphabets, for instance, I recall the word  
>Greyhound for G.

The way I was taught it, back in the days when knowing and using it was important, was that the words were chosen for their "international" flavour.

So, anywhere in the world you will find people understand the word "Golf", few understand "Greyhound". They race them in Britain and the U.S. and the bus line by that name only runs in the U.S.

Think about it. Alpha, Bravo, Charlie, Delta, Echo, Foxtrot, Golf, Hotel, India, Juliet, Kilo, Lima, Mike, November, Oscar, Papa, Quebec, Victor, Whisky, X-ray, Yankee, Zulu.

Of all of the above, the only one I know of that is not a word common to many languages and cultures is X-ray. Many countries use other words for an X-ray such of Roentigen or radiogramma.

The fact that these words are so common is the best reason for using them with non-native english speakers rather than phonetics from WW-II or made up on the fly.

These phonetic set was first adopted by ICAO (International Cival Aviation Organisation?), then NATO then the ITU. But still to this day, many international phone operators do not know these phonetics.

--

Julian Macassey, N6ARE julian@bongo.tele.com Voice: (213) 653-4495  
Paper Mail: 742 1/2 North Hayworth Avenue, Hollywood, California 90046-7142

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Date: 10 Jun 93 01:32:33 GMT  
From: munnari.oz.au!metro!mippet.ci.com.au!eram!dave@tcgould.tn.cornell.edu  
To: info-hams@ucsd.edu

References <m16ugfINN5g8@exodus.Eng.Sun.COM>, <4034@eram.esi.COM.AU>,  
<1993Jun8.200619.5229@combdyn.com>so.  
Subject : Re: ft530 rubber resistor: tuned low?

Thanks for those reports; I'll pass 'em (anonymously) back to our Yaesu  
agent and he what he says; Japan may have been handing him a line. Of  
course, they don't have 2m repeaters in JA, do they...

--

Dave Horsfall (VK2KFU)	VK2KFU @ VK2RWI.NSW.AUS.OC	PGP 2.2
dave@esi.COM.AU	...munari!esi.COM.AU!dave	available

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End of Info-Hams Digest V93 #708  
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